

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of : Mario Cardozo et al) Docket No.: 9/182-1-C1
Serial No. : to be assigned) Art Unit: to be assigned
Confirmation No.: to be assigned) Examiner: to be assigned
Filed : January 10, 2002)
For : Method for Selecting Compounds from a Combinatorial
or Other Chemistry Library for Efficient Synthesis

Box PATENT APPLICATION
Assistant Commissioner for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

Please amend the subject application as follows:

Please cancel Claim 1.

Please add Claim 2 as shown on the enclosed sheet entitled "Clean Copy".

Respectfully submitted,



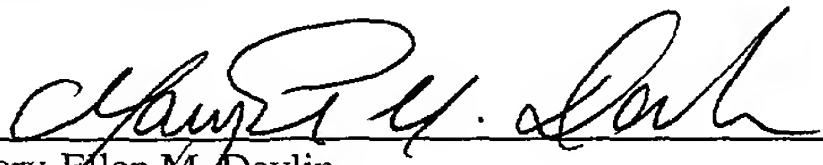
Mary-Ellen M. Devlin
Attorney for Applicant(s)
Reg. No. 27,928

Patent Department
Boehringer Ingelheim Corp.
900 Ridgebury Road
P.O. Box 368
Ridgefield, CT. 06877
Tel.: (203) 798-4866
Dated: January 10, 2002
Docket No. 9/182-1-C1

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By:


Mary-Ellen M. Devlin
Reg. No. 27,928

WHAT IS CLAIMED IS:

2. A method for determining the most efficient synthesis of a representative set of compounds from a large chemical library, which large chemical library has been partitioned into regions of similarity or clusters, each cluster being represented by a skeletal structure having a core, locations for substitutions on the core (specific substituent group location) and a set of substituents for each substituent group location, the improvement which comprises;
- (a) determining the most frequent substituent within a specific substituent group location across the clusters;
 - (b) eliminating all the clusters and their contents for that substituent determined in step a);
 - (c) repeating steps a) and b) for all substituents to produce a first ordered list;
 - (d) repeating steps a), b) and c) for each specific substituent group location to generate second, third, etc. ordered lists;
 - (e) determining the cross-products of each of the lists;
 - (f) eliminating all the clusters covered by such cross-products;
 - (g) repeating steps a) through f) until all clusters have been eliminated; and
 - (h) synthesizing the representative set of compounds according to the results of step (g).